

Exhibit E

IN THE UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF MASSACHUSETTS

CYTOLOGIX CORPORATION,)	
)	
Plaintiff,)	
vs.)	CIVIL ACTION NO.
)	04-11783 (RWZ)
VENTANA MEDICAL SYSTEMS, INC.)	
)	
Defendant.)	
)	

VIDEOTAPED DEPOSITION OF
GEOFFREY D. NUNBERG, Ph.D.

April 20, 2006

REPORTED BY: CAROLYN M. MANN, CSR 10066

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FOR THE DISTRICT OF MASSACHUSETTS

CYTOLOGIX CORPORATION,

Plaintiff,

vs.

VENTANA MEDICAL SYSTEMS, INC.

Defendant.

)
)
)
) CIVIL ACTION NO.
) 04-11783 (RWZ)
)
)
)

8 BE IT REMEMBERED that pursuant to Notice,
9 and on Thursday, April 20, 2006, commencing at 12:05
10 p.m. thereof, at Four Embarcadero Center, 10th
11 Floor, San Francisco, California, before me, CAROLYN
12 M. MANN, a Certified Shorthand Reporter, personally
13 appeared

14 GEOFFREY D. NUNBERG, Ph.D.,
15 called as a witness by the Plaintiff, who, having
16 been first duly sworn, was examined and testified as
17 follows:

18 --o0o--

19 KIRKPATRICK & LOCKHART NICHOLSON GRAHAM,
20 State Street Financial Center, One Lincoln Street,
21 Boston, Massachusetts 02111-2950, represented by
22 MICHAEL E. ZELIGER and LARISSA S. BIFANO, Attorneys
23 at Law, appeared as counsel on behalf of the
24 Plaintiff (by video conference).

25 WILSON SONSINI GOODRICH & ROSATI, One

1 Market Street, Spear Tower, Suite 3300, San
2 Francisco, California 94105-1126, represented by
3 ROGER J. CHIN, M.D., Attorney at Law, appeared as
4 counsel on behalf of the Defendant.

5 ALSO PRESENT: Stephanie Bonfield; John
6 Trengali (by video conference); Jake Krohn,
7 videographer.

8 --oOo--

9 P R O C E E D I N G S

10 (Exhibits 1 through 5 were marked prior to
11 the start of the deposition.)

12 THE VIDEOGRAPHER: Okay. Here begins
13 videotape number one in the deposition of Professor
14 Geoffrey Nunberg in the matter of CytoLogix
15 Corporation vs. Ventana Medical Systems,
16 Incorporated in the United States District Court for
17 the District of Massachusetts, case number 04-11783
18 (RWZ). Today's date is April 20th, 2006. The time
19 on the video monitor is 12:06 p.m. The video
20 operator today is Jake Krohn, a notary public
21 contracted by LegaLink Boston, Boston,
22 Massachusetts. This video deposition is taking
23 place at Four Embarcadero, San Francisco,
24 California, and was noticed by Michael Zeliger of
25 Kirkpatrick & Lockhart.

1 Counsel, please voice identify yourselves
2 and state whom you represent.

3 MR. ZELIGER: This is Michael Zeligier of
4 Kirkpatrick & Lockhart Nicholson Graham on behalf of
5 the plaintiff, CytoLogix. With me here in Boston
6 participating by video conference is Larissa Bifano.
7 And in San Francisco, also with Kirkpatrick &
8 Lockhart, is our paralegal, Stephanie Bonfield. For
9 the moment we also have John Trengali, who is a
10 member of our IT department, who is also here in
11 Boston.

12 MR. CHIN: Roger Chin of Wilson, Sonsini,
13 Goodrich and Rosati on behalf of defendant, Ventana
14 Medical Systems.

15 THE VIDEOGRAPHER: Okay. I guess, would
16 all others present please state your name for the
17 record.

18 THE WITNESS: Geoffrey Nunberg.

19 THE VIDEOGRAPHER: Sorry. Stephanie?

20 MS. BONFIELD: Stephanie Bonfield.

21 THE VIDEOGRAPHER: All right. Would the
22 reporter please swear in the witness.

23 (Whereupon, the Witness was sworn)

24 THE VIDEOGRAPHER: Please begin.

25 EXAMINATION BY MR. ZELIGER

1 or responses to office actions.

2 A. I worked with the attorney who prepared
3 the patents, and then subsequently worked with that
4 attorney when there was some question about -- there
5 were some issues of prior art that came up that we
6 responded to, and there was some question as to
7 bringing an infringement suit against somebody else
8 that we worked on for a while, and nothing ever
9 happened in that, in that.

10 Q. Are you familiar with the phrase "one of
11 ordinary skill in the art"?

12 A. I know the phrase, yes.

13 Q. What does -- what's your understanding of
14 that phrase?

15 A. I take it that it means what it says: One
16 of ordinary skill in the art, a person who is of
17 ordinary skill in the art.

18 Q. Who is one of ordinary skill in the art of
19 the '261 patent?

20 A. I think it depends what part of the
21 language of the patent you're -- if we're talking
22 about ordinary skill in the art with regard to the
23 language of the patent, the language of the patent
24 rather than some other aspects of the patent, I take
25 it it depends on whether that language is particular

1 to the domain of mechanical engineering that would
2 be relevant to this particular invention, or merely
3 one who was a native speaker of, of, a competent
4 native speaker of the language that was spoken in
5 the community in which that patent was filed.

6 Q. Prior to my asking you just now, have you
7 considered who one of ordinary skill is in the art
8 of the '261 patent?

9 A. Can you clarify what you mean by have I
10 considered what -- I'm not sure I understand the
11 question.

12 Q. Well, I asked you who one of ordinary
13 skill in the art of the '261 patent is, and you gave
14 me an answer that was somewhat equivocal. So my
15 follow-up question is, have you thought about that
16 prior to me asking you today?

17 A. Yes.

18 Q. Do you consider yourself to be one of
19 ordinary skill in the art of the '261 patent?

20 A. If by "the art of the '261 patent" you
21 mean the aspects of, let's say, mechanical
22 engineering that are relevant to the development of
23 this particular product, no.

24 Q. Well, what do you consider to be the art
25 of the '261 patent?

1 A. I'm not a mechanical engineer, so I simply
2 would assume it has -- I'm not even aware of how the
3 divisions of mechanical engineering are set up,
4 whether medical device manufacturers --

5 Q. In forming your opinion . . .

6 A. You go ahead.

7 Q. In forming your opinions that appear in
8 the declaration that you recently submitted, did you
9 consider the level of ordinary skill in the art of
10 the '261 patent?

11 A. Again, I have to know what you mean, did I
12 consider. I don't understand the question.

13 Q. Did you consider how one of ordinary skill
14 in the art of the '261 patent, how that person would
15 understand the terms in the claims?

16 A. Yes.

17 Q. How did you do that -- well, first of all,
18 if you've done that, then you must have some
19 understanding of who one of ordinary skill in the
20 art is, correct?

21 MR. CHIN: Object to the form.

22 MR. ZELIGER: Q. You may answer.

23 A. Yes.

24 Q. And I'd like to know what your
25 understanding is of what, of who the person is who

1 has ordinary skill in the art in the '261 patent.

2 A. I take it that this would be a person who
3 was a competent speaker of English, which is all of
4 the skill or knowledge that would be relevant to
5 determining the meanings of the basic English terms
6 and grammatical apparatus and pronouns and so forth
7 that were used in the, in the patent, as well as one
8 with sufficient specialized knowledge of the field
9 to understand such technical terms and terms of art
10 as are included in the patent.

11 Q. Do you have the knowledge of the second
12 half of your answer; that is, the technical skills
13 necessary to understand terms of art that are used
14 in the '261 patent?

15 A. No, I don't.

16 Q. Do you understand, sir, that under U.S.
17 patent law, claims are to be interpreted according
18 to the understanding of one of skill in the relevant
19 art?

20 A. Yes, I do.

21 Q. If you lack those skills, how is it that
22 you are able to offer an opinion about the meaning
23 of the claim terms?

24 A. As I said, one of ordinary skill in the
25 art includes, on the one hand, the specialized

1 knowledge necessary to understand terms of art and
2 technical terms as used in the patent; on the other
3 hand, knowledge of the rules of English and the
4 English constructions that are common to all arts
5 and, in fact, all literate English communities. So
6 that to be one of ordinary skill in -- what one's
7 knowledge of, say, mechanical engineering is perhaps
8 relevant to the way in which one uses one or another
9 technical term of mechanical engineering. It is not
10 relevant to the way one understands the pronoun
11 "it."

12 Q. Given your background, which we
13 acknowledge is quite extensive and impressive, given
14 your background in linguistics, do you consider
15 yourself qualified to offer opinions on any patent
16 claims that are written in English, regardless of
17 the subject matter?

18 MR. CHIN: Object to the form of the
19 question.

20 THE WITNESS: That depends on what
21 particular aspect of the claim you're talking about.
22 As I say, if the claim involves -- if the question
23 about the claim involves the ordinary grammatical
24 apparatus of English and is in no wise specialized
25 with regard to a particular subfield of, of, of art,

1 then yes.

2 MR. ZELIGER: Q. Without a background in
3 a particular specialized subfield, how do you know
4 whether you're confronting a term of art?

5 A. There are some terms of art that are
6 manifestly terms of art and one either recognizes
7 instantly as terms of art, or as at least terms that
8 do not have their ordinary English uses. There are
9 some terms of art that might be misleading to one
10 who was not adept in a particular field. There are
11 other elements of language -- tenses, pronouns,
12 ordinary common verbs like "is" and "are" and, and
13 "be" and "move" and "touch" and so on -- whose use
14 is general for all forms and all registers of
15 English and which, because they denote very general
16 logical relations, can't, and are never -- can't be
17 and are never terms of art.

18 Q. Do you have any experience with automated
19 slide staining equipment, either professional
20 experience or educational experience?

21 A. No.

22 Q. Do you have any such experience with
23 designing mechanical equipment?

24 A. No.

25 Q. Do you have any such experience with the

1 operation of laboratory instruments?

2 A. No.

3 Q. Do you have any such experience with
4 pathology?

5 A. No.

6 Q. Do you have any such experience with
7 cytology?

8 A. No.

9 Q. Do you have any experience working in a
10 laboratory?

11 A. No.

12 Q. Do you have any experience working with
13 reagents?

14 A. No.

15 Q. Do you have any experience with
16 slide-based cellular diagnostics?

17 A. No.

18 Q. In the process of forming your opinions
19 that appear in your declaration, did you consult
20 with anyone who has these experiences?

21 A. No.

22 Q. So in forming your opinion, you have not
23 consulted with anyone who is skilled in the
24 mechanical arts associated with the '261 patent?

25 A. That's right.

1 Q. And you lack those skills and experiences
2 yourself.

3 A. That's right.

4 Q. Are you familiar with the term "platform"?

5 A. In a general way, yes.

6 Q. What does "platform" mean to you?

7 MR. CHIN: Object to the form.

8 THE WITNESS: I wouldn't want to hazard a
9 definition offhand, but in the general sense of the
10 term, I'm familiar with it.

11 MR. ZELIGER: Q. Well, as I understand
12 your declaration, you've offered opinions about the
13 standard English understanding of certain terms.

14 A. That's right.

15 Q. Do you have an understanding of the
16 standard English understanding of the term
17 "platform"?

18 A. I have an understanding of the standard
19 English understanding of the word "platform." I
20 don't know that that understanding is relevant to
21 the use of "platform" in the patent.

22 Q. Were your opinions where you've discussed
23 the standard written, or the standard English
24 understanding of certain terms done in the context
25 of the patent?

1 A. Can you either repeat or elaborate that?

2 Q. Well, let's do it a different way.

3 What is your understanding of the term
4 "platform"?

5 MR. CHIN: Object to the form.

6 THE WITNESS: Again, I'd want to -- I
7 don't want to offer a definition offhand, but I
8 understand the general meaning of the English word
9 "platform" as, which, which, which may in turn have
10 more specific or specialized uses relevant to
11 various arts or, or, or fields of science or fields
12 of trade with which I'm not specifically familiar.

13 MR. ZELIGER: Q. Are you able to answer
14 my question, which is, what is your understanding of
15 the term "platform"?

16 MR. CHIN: Objection. That's been asked
17 and answered.

18 THE WITNESS: In this document or in
19 general?

20 MR. ZELIGER: Q. According to standard
21 English.

22 A. Off the top of my head and without
23 consulting dictionaries, which is a procedure I
24 don't like to do, I would say it denotes a raised
25 surface on which objects are supported or arrayed.

1 Q. According to that definition, does a
2 platform have to be round?

3 MR. CHIN: Object to the form.

4 THE WITNESS: No.

5 MR. ZELIGER: Q. According to that
6 definition, does a platform have to be a rotary
7 carousel?

8 A. No.

9 Q. I'd like to direct your attention to the
10 phrase that appears in your declaration. Actually,
11 let's, let's mark it as an exhibit so that we're not
12 speaking purely in theoretical terms.

13 Stephanie, would you please hand to the
14 court reporter the original Exhibit No. 5. If it's
15 already been premarked, then you may simply hand it
16 to the witness. If the court reporter has not yet
17 initialled it, please hand it to the court reporter.

18 THE REPORTER: This is Carolyn, the court
19 reporter. We did pre-mark all the exhibits prior to
20 the deposition.

21 MR. ZELIGER: Very well. Thank you.

22 So please just hand Professor Nunberg the
23 original Exhibit 5 and a copy to Mr. Chin.

24 MR. CHIN: Did you want the declaration?
25 I think that's number 1.

1 relevant art.

2 MR. ZELIGER: What I'd like to do now is
3 take a short break. And Stephanie, I will e-mail to
4 you three exhibits. They're each one page, they're
5 very short, and if you have a chance to just print
6 out --

7 MS. BONFIELD: All right.

8 MR. ZELIGER: -- two copies, an original
9 and a copy, we can reconvene in about 10 minutes.

10 And I can assure you both we won't go very
11 long today. I'd be surprised if I have more than an
12 additional hour worth of questioning.

13 THE WITNESS: Great.

14 MR. ZELIGER: Thank you.

15 THE VIDEOGRAPHER: Off the record at
16 12:43.

17 (Whereupon, a recess was taken and
18 Deposition Exhibits 8, 9, and 10 were
19 marked for identification.)

20 THE VIDEOGRAPHER: We are back on the
21 record at 12:58, and this is the beginning of tape
22 number two.

23 MR. ZELIGER: Please hand to Professor
24 Nunberg Exhibit 8, and a copy to Mr. Chin.

25 Q. Professor Nunberg, you have in front of

1 you marked as Exhibit 8 a page with some text on it.

2 Would you please read the text aloud for the record.

3 A. "Moving the probe and the probe dispense
4 station relative to one another."

5 Q. Under standard English interpretation,
6 what does this phrase mean?

7 MR. CHIN: Object to form.

8 THE WITNESS: I'm going to assume here
9 that this is used in a larger syntactic frame
10 analogous to that of the phrase in question in the
11 claim in the patent? That is to say --

12 MR. ZELIGER: Q. You assume correctly.

13 A. -- that it follows "a method of"?

14 Q. Indeed.

15 A. Okay. Then the phrase denotes an act of
16 moving two things, a probe and a probe dispense
17 station, such that their relative positions are at
18 some point changed.

19 Q. Much like the language that's at issue in
20 your declaration, correct?

21 A. Yes.

22 Q. So in your view, the language on Exhibit 8
23 would require both the probe and the probe dispense
24 station to be in motion; is that correct?

25 MR. CHIN: Object to form.

1 THE WITNESS: Yes, at a minimum.

2 MR. ZELIGER: Please hand Professor
3 Nunberg Exhibit No. 9 and hand a copy to Mr. Chin.

4 Q. Professor Nunberg, you now have before you
5 what's been marked as Exhibit No. 9, another
6 document that has a phrase written on it. Would you
7 please read the phrase aloud for purposes of the
8 record.

9 A. "Said nozzle support and said slide
10 support moving relative to one another," of "one
11 another other."

12 MR. CHIN: Is there a typo here, Mike?

13 MR. ZELIGER: There is.

14 Q. Please strike the last "other." Actually,
15 take a pen and strike the last "other." Thank you.

16 A. Okay.

17 Q. According to standard written English,
18 when interpreting this phrase is it your opinion
19 that both the slide support and the nozzle support
20 move?

21 A. Yes. Assuming, again, the larger context,
22 that this is a, a gerund -- I don't know what the
23 syntactic context is in which -- this is a phrase,
24 this is a, so to speak, a sentence fragment, but
25 yes, one would assume that in whatever way it's

1 construed, there has to be motion of both the nozzle
2 support and slide support.

3 Q. Go back to Exhibit 8, please.

4 A. Eight being the probe and probe dispense
5 station?

6 Q. Yes, that's correct. Did Ventana or its
7 counsel inform you that they have issued patent
8 claims that contain this text?

9 A. No.

10 Q. Did Ventana or its counsel inform you that
11 the patent that has this claim text in it discloses
12 as its only embodiment an instrument where the probe
13 dispense station is stationary?

14 MR. CHIN: Object to the form.

15 THE WITNESS: No.

16 MR. ZELIGER: Q. Please turn to
17 Exhibit 9. Did Ventana --

18 A. Nozzle support.

19 Q. -- or its counsel disclose to you as
20 pending patent applications that contain claims with
21 this language?

22 (Reporter interruption)

23 MR. ZELIGER: Q. Did Ventana or its
24 counsel inform you that Ventana has a pending patent
25 application with a claim that contains this

1 language?

2 A. No.

3 Q. Did Ventana or its patent counsel inform
4 you that that application has as its only embodiment
5 an instrument with a stationary slide support?

6 A. No.

7 MR. ZELIGER: Please hand to Professor
8 Nunberg Exhibit No. 7, with a copy to Mr. Chin.
9 Excuse me, I'm sorry, not 7, but rather 2,
10 Exhibit No. 2.

11 Q. You've been handed what's marked as
12 Nunberg Exhibit No. 2. I'll ask you to identify
13 this document for the record, please.

14 A. This is U.S. Patent Richards, et al.

15 Q. What is the patent number, sir?

16 A. 6,537,818.

17 Q. And on the left-hand column, you'll see
18 next to the number 73 it says "Assignee." Who is
19 identified as the assignee?

20 A. Ventana Medical Systems.

21 Q. Please turn to claim 30, which appears in
22 column 16 of Exhibit No. 2.

23 A. I'm sorry. Claim 30 . . .

24 Q. Is in column 16.

25 A. Which is on -- oh, I see. The columns are

1 numbered. Yeah.

2 Q. Take a moment to read claim 30.

3 A. Okay.

4 Q. Are you familiar with the term
5 "embodiment"?

6 A. Yes.

7 Q. As that's used in patent law?

8 A. Yes.

9 Q. Do you understand, sir --

10 A. I'm not --

11 Q. -- that claims are not to be construed to
12 exclude an embodiment disclosed in the patent?

13 A. Can you repeat the, the question?

14 Q. Do you understand, sir, that claims are to
15 be construed so as not to exclude the disclosed
16 embodiments?

17 MR. CHIN: Object to the form of the
18 question.

19 MR. ZELIGER: Q. Do you understand what
20 I --

21 A. Yes.

22 Q. -- say, what I mean when I say that?

23 A. Yes, yes.

24 Q. I'm sorry. I couldn't hear your response.

25 A. Yes.

1 Q. The '818 patent, which has been marked as
2 Exhibit 2, discloses as its only embodiments an
3 instrument in which the probe dispense station is
4 stationary. That's inconsistent with your
5 interpretation of the language in claim 30, is it
6 not?

7 MR. CHIN: Object to the form of the
8 question.

9 THE WITNESS: If, as you say, the
10 embodiment offered for this patent is one in which
11 the disengagement of the lower surface of the probe
12 from the portion of the upper surface of the probe
13 dispense station does not, in fact, involve moving
14 both the probe and the probe dispense station, then
15 yes, in answer to your question.

16 MR. ZELIGER: Q. Does that change your
17 view about how one of ordinary skill in the art
18 might understand this, the claim language in claim
19 30?

20 MR. CHIN: Object to the form.

21 THE WITNESS: No.

22 MR. ZELIGER: Q. So you just think that
23 it's wrong?

24 MR. CHIN: Object to the form. Assumes
25 facts.

1 THE WITNESS: Again, I don't -- I haven't
2 looked at this patent and have, certainly have no
3 knowledge of the embodiment, short of what you
4 represented it as being, but if it is as you say,
5 and as I suggested in my answer to the previous
6 question, then it is misdescribed by claim 30.

7 MR. ZELIGER: Please hand Professor
8 Nunberg Exhibit 3, with a copy to Mr. Chin.

9 Q. Would you please identify for the record
10 what Exhibit 3 is.

11 A. Exhibit 3 is a patent application,
12 publication, the number US 2003/0203493 A1, the pub
13 date October 30th, 2003, and the assignee Ventana
14 Medical Systems.

15 Q. What is the title of this patent
16 application that's shown next to the number 54?

17 A. "Automatic" -- sorry. "Automated
18 Molecular Pathology Apparatus Having Fixed Slide
19 Platforms."

20 Q. Please turn to draft claim 45, which
21 appears on the last page of the exhibit. And in
22 particular -- you're welcome to read the entire
23 claim or anything else that you deem necessary, but
24 I would like to draw your attention to subpart (c)
25 in claim 45 and ask you to read that aloud for the

1 record, please.

2 A. "A nozzle support having nozzles for
3 applying liquids, said nozzle support and said slide
4 support moving relative to one another such that the
5 nozzles may apply liquids to the slides."

6 Q. Now, do you recall the title of this
7 patent application is "Automated Molecular Pathology
8 Apparatus Having Fixed Slide Platforms"?

9 A. Yes.

10 Q. I will represent to you, and there should
11 be little doubt, based on the title, that the
12 embodiments disclosed in this patent application
13 only disclose a slide support mechanism that is
14 stationary.

15 MR. CHIN: Object to form.

16 THE WITNESS: The question is?

17 MR. ZELIGER: Q. The question is, does
18 the claim, according to your interpretation, cover
19 that embodiment?

20 MR. CHIN: Object to form.

21 THE WITNESS: I'm not in a position to say
22 what the relation in this invention is of the fixed
23 slide platforms and the nozzle supports and slide
24 supports mentioned in claim (c). So I can't really
25 speak to the relationship of this to the embodiment.

1 No sound.

2 MR. ZELIGER: Sorry about that. I hit the
3 wrong button.

4 Q. I'm not asking you to do that. I'm asking
5 you to accept my representation that in this, in the
6 embodiments disclosed in this patent application,
7 the slide supports are stationary. And based on
8 that representation, I'm asking you whether the
9 claims, as you understand them, would cover such an
10 embodiment.

11 MR. CHIN: Object to form.

12 THE WITNESS: Claim (c) applies to a
13 nozzle support and said slide support, which is a
14 slide support mentioned in (a) of claim 45. And on
15 the assumption that what you've represented about
16 the embodiment is that those two things, the nozzle
17 support and the slide support, are both stationary,
18 did you say, or . . .

19 MR. ZELIGER: Q. No, the slide support is
20 stationary. The slide support alone is stationary.

21 A. Then if that's the case, that embodiment
22 would be misdescribed by 44, 45(c).

23 Q. Are you aware, sir, that this patent
24 application covers, intended to cover the device
25 that's been accused of infringement in this case?

1 MR. CHIN: Object to the form.

2 THE WITNESS: No.

3 MR. ZELIGER: Q. Does the fact that
4 Ventana's own patent application describing a
5 stationary thing as being moving relative to
6 something else that is moving change your opinion in
7 any way?

8 A. No.

9 MR. CHIN: Object to form.

10 MR. ZELIGER: Q. So you think it's wrong?

11 MR. CHIN: Object to form.

12 THE WITNESS: I'll repeat what I said
13 before. I think it misdescribes the embodiment that
14 you've described, if the embodiment is as you
15 described it.

16 MR. ZELIGER: Stephanie, would you please
17 hand to Professor Nunberg Exhibit 10, with a copy to
18 Mr. Chin.

19 Q. Professor Nunberg, what -- we've handed
20 you a copy of Exhibit 10. And I'll represent to
21 you, but you may confirm, if you like, that this
22 table shows the claim language of the three
23 different phrases that we've been considering;
24 namely, a portion of claim 1 of the '261 patent, a
25 portion of claim 30 of the '818 patent, and a

1 portion of draft claim 45 of the '493 patent
2 application. Do you see that?

3 A. Yes. Let me just add that, on this one as
4 well, I'm going to strike the second "other" from
5 the '493 claim.

6 Q. I appreciate that. I'm doing the same on
7 my copy. Thank you.

8 We've been through this, but I just want
9 to make sure I understand your testimony. It's your
10 opinion that in each of these three boxes, the two
11 structures that are described as being relative to
12 each other must each move.

13 MR. CHIN: Could I have the question back?

14 MR. ZELIGER: Let me try a better one.

15 Q. In Exhibit 10, three, portions of three
16 claims or three claimed, or three draft claims are
17 included. My question to you, sir, is is it your
18 opinion that in each of these, the two structures
19 identified must move?

20 A. Yes.

21 Q. Does the fact that there are now three
22 different claims, or patent claims, patents or
23 patent applications suggest to you that according to
24 one of ordinary skill in the art, this language
25 could describe a situation where one of the two

1 objects is stationary?

2 A. No.

3 Q. If I showed you 10 more patents that had
4 this same construct, would that change your view?

5 MR. CHIN: Object to form.

6 THE WITNESS: Probably not.

7 MR. ZELIGER: Q. If I showed you 100 more
8 patents that were worded in this way and disclosed
9 embodiments where only one of the two objects moves,
10 would that change your view?

11 MR. CHIN: Object to form. Calls for
12 speculation and assumes facts.

13 THE WITNESS: Probably not.

14 MR. ZELIGER: Q. Is there any number of
15 patents that would disclose such a construct that
16 would change your opinion?

17 MR. CHIN: Same objections.
18 Argumentative.

19 THE WITNESS: Probably if it were
20 uniformly or near uniformly the case that this
21 construction was used in mechanical engineering
22 patents only to denote cases of this type,
23 embodiments of this type.

24 MR. ZELIGER: Q. Have you consulted any
25 mechanical engineering patents to determine whether

1 A. If one takes the axis of the earth as, as,
2 as fixed, as a fixed point, yes.

3 Q. Well, regardless of whether one takes that
4 as a fixed point, it's true that the building is
5 revolving around it; isn't that true?

6 A. This is exceeding my high school physics,
7 but if you plot, if you plot the point of the
8 building, motion the plot of the point of the
9 building in space as the axis is moving, I don't
10 know what you get. You'd probably get a -- I'm not
11 sure what the name of that curve is, but I don't
12 know if I'd describe it as rotation, since the
13 building never returns to its original position.
14 But this is speculative high school physics, a
15 discipline which I hadn't mastered even a year, a
16 month after dropping the course or whatever.

17 Q. But you'll agree with me that the building
18 is moving relative to the axis of the earth,
19 correct?

20 A. Yes.

21 Q. And the building is moving relative to the
22 sun.

23 A. Yes.

24 Q. But when we say, "The elevator is moving"
25 and we don't provide any other language, our

1 it, it may not be relevant to talking about objects
2 at a subatomic level or to the objects with which
3 cosmologists concern themselves, but anything,
4 pretty much anything between those two, two levels
5 is going to be governed by, by the same principles.

6 Q. If we go back to the language that's at
7 issue in the, claim 1 of the '261 patent. And you
8 can look at the patent, or if you prefer, why don't
9 you take a look at Exhibit 10, which is the chart
10 that has the different terms. And claim 1 of
11 the '261 is excerpted in the first box. Do you see
12 that?

13 A. Yes.

14 Q. If we strike -- I'm not asking you to do
15 this, I don't want you to mark on the exhibit, but
16 assume for a moment that we strike the last line of
17 text in that box relative to each other.

18 A. Yes.

19 Q. How does that change your view of what
20 this claim means?

21 MR. CHIN: Object to form.

22 THE WITNESS: It would continue to entail
23 that the method was one that involved moving the
24 platform and one that involved moving the liquid
25 dispenser, but would no longer entail that either at

1 some point during the motion or at the end point of
2 the motion those two were in different relative
3 positions from one another.

4 MR. ZELIGER: Q. It would not require
5 that they be in different positions at some point;
6 is that correct?

7 A. Right. So if they were moved -- I'm
8 doing -- if they were moved together, such that
9 their relative positions did not change at any point
10 during the motion or at the end point of the motion,
11 then it would be true that one had moved the
12 platform and the liquid dispenser but presumably
13 false that one had moved the platform and the liquid
14 dispenser relative to each other.

15 Q. But it would not preclude a situation
16 where each is moving and they wind up in different
17 positions.

18 A. No. It, it, it would leave it neutral as
19 to whether their ultimate relative positions changed
20 either at some point during the motion or at the
21 end, at the end of the motion.

22 Q. As part of your analysis in this case, did
23 you consult a physics book for examples of how
24 relative motion is described?

25 A. No.

1 MR. ZELIGER: Q. So the precedent is "a
2 platform," not "a moving platform," correct?

3 A. The antecedent, you mean.

4 Q. Antecedent, excuse me.

5 A. The original antecedent, yes, is "a
6 platform," which is -- occurs again as the object of
7 the verb "move" in the inserted part of claim 6, and
8 then is further referred to as "the platform" in the
9 last clause of claim 6, and then as specified in
10 claim 8 as "a moving platform capable of indexing
11 slides," et cetera.

12 Q. If the -- why add "platform is a" --

13 (Reporter interruption)

14 MR. ZELIGER: Q. Why add the language
15 "platform is a" to claim 8? What does that add?

16 MR. CHIN: Object to the form of the
17 question.

18 THE WITNESS: As I say, all it does is
19 change what was a presupposition -- that the
20 platform is capable of moving -- to an assertion
21 that the platform is, among other things, a platform
22 capable of moving. There's a difference of focus or
23 emphasis, as linguists might describe it.

24 MR. ZELIGER: Q. Is it superfluous, in
25 your view?

1 MR. CHIN: Object to form.

2 THE WITNESS: It does not alter the truth
3 conditions of the claim, in linguistic terms. That
4 is to say, it's not conceivable that there should be
5 a state of affairs in which claim A is true under
6 one wording and false under the other.

7 MR. ZELIGER: Q. So it has no impact on
8 the claim scope?

9 A. That's right.

10 Q. Is it a more plausible explanation that
11 the applicant struck the word "moving" from claim 6
12 to indicate that the platform need not move in
13 claim 6, and then in claim 8 explained under certain
14 circumstances the platform is a moving platform?

15 MR. CHIN: Can I have that question back,
16 please.

17 (Record read by the reporter)

18 MR. CHIN: Object to the form of the
19 question. It's vague, compound, and confusing.

20 THE WITNESS: Yeah, I simply can't speak
21 to what the applicant's intentions might have been
22 or what the applicant's apprehensions as to the
23 meaning of these various phrases may have been. I
24 can only speak to the way the phrases would be
25 interpreted by a linguistically competent neutral

1 A. Let me just stipulate -- I don't recall
2 how I used it, but let me just say that we may speak
3 of relative motion as motion of at least two objects
4 such that at some point during the course of the
5 motion or at the termination of the motion, the
6 relative position of the two objects is different
7 from what it was at the beginning of the motion. Is
8 that fair?

9 Q. Is it your opinion that for there to be
10 relative motion between two objects, both objects
11 must move?

12 MR. CHIN: Object to form.

13 THE WITNESS: I don't know. Let me think.

14 MR. ZELIGER: Q. Well, let me give you an
15 example. I'm sorry. Did you have additional, an
16 additional answer?

17 A. No. Go ahead with the example you have in
18 mind.

19 Q. I gather you lecture from time to time
20 from a lectern?

21 A. Yes.

22 Q. I want you to envision that you're
23 standing in front of a classroom at a lectern.

24 A. Yes?

25 Q. And behind you, the wall moves from left

1 to right while your lectern removes bolted to the
2 floor.

3 A. A more reasonable assumption in this part
4 of the world than yours, yes.

5 Q. So while the wall is moving, is the wall
6 moving relative to you?

7 A. So there's an earthquake, the wall moves,
8 the lectern is bolted to the floor and for some
9 reason isn't moving. I'm standing at the lectern.
10 Yes, the wall is moving relative to me.

11 Q. I'm going to take the earthquake, the
12 complexity of the earthquake out of it. I want you
13 to assume that the wall is like a retractable wall.

14 A. Okay.

15 Q. So imagine now that the wall is moving;
16 the lectern remains bolted to the floor. Is the
17 wall moving relative to you?

18 A. So it's -- the wall is moving to the side
19 or . . .

20 Q. Yes, from left to right.

21 A. I guess I would say it was, yes.

22 Q. Are you moving relative to the wall at
23 that point?

24 A. No.

25 Q. Now I'm going to change the hypothetical a

1 little bit and say that the wall remains stationary
2 but now your lectern is mounted on wheels. And
3 during your lecture, the lectern moves from left to
4 right. During that motion, are you moving relative
5 to the wall?

6 A. And I'm tracking the lectern and the
7 lectern is dragging me along with it or something?

8 Q. You're standing on a platform in front of
9 the lectern. The platform and lectern are moving
10 together from left to right.

11 A. Yes, then I'm moving relative to the wall.

12 Q. Is the wall moving relative to you?

13 A. No.

14 Q. Isn't it true that all motion is relative?

15 MR. CHIN: Object to form. Vague.

16 THE WITNESS: I simply don't know what you
17 mean by that. I can imagine 18 things you might
18 mean, so you'll have to be more specific.

19 MR. ZELIGER: Q. Isn't it true that in
20 both cases that I've described to you -- namely,
21 where in one instance the lectern moves, in the
22 other instance the wall moves -- in both cases, you
23 are moving relative to the wall and the wall is
24 moving relative to you?

25 MR. CHIN: Could I have that question

1 back, please.

2 MR. ZELIGER: Q. I'll repeat it. Isn't
3 it true in both cases you are moving relative to the
4 wall and the wall is moving relative to you?

5 MR. CHIN: Object. That's been asked and
6 answered, and that's also compound.

7 THE WITNESS: No.

8 MR. ZELIGER: Q. If standard lectures on
9 basic physics said the opposite, would that change
10 your view or your opinions in this case?

11 A. Not with regard to the ordinary English
12 meaning of those sentences that we've been
13 discussing, no.

14 Q. How about with regard to how relative
15 motion would be understood by a mechanical engineer?

16 A. Again, no. It would have no effect.

17 Q. And you say that without knowing how a
18 mechanical engineer understands those terms; isn't
19 that correct?

20 MR. CHIN: Object to form.

21 THE WITNESS: I assume that when a
22 mechanical engineer writes a patent, some of the
23 language that he or she uses involves terms of art
24 that are specific to mechanical engineering, but
25 that when the mechanical engineer uses an "S" to

1 form the third person present form of a verb or uses
2 the word "the" to denote something to which earlier
3 reference is being made, or uses the pronoun,
4 pronominal "each other" to indicate a reciprocal
5 relation, that he or she is speaking or writing not
6 in his or her capacity as a mechanical engineer but
7 in his or her capacity as a graduate of kindergarten
8 in the English-speaking world.

9 MR. ZELIGER: Q. And in your view,
10 anybody who's graduated from kindergarten would
11 understand that in the phrase "moving the platform
12 in a liquid dispenser relative to each other"
13 requires both the platform and the liquid dispenser
14 to move?

15 A. Inasmuch as "relative to," unlike "and"
16 and "each other" is not something most people have
17 mastered by the time they're out of kindergarten,
18 let me take it up to seventh or eighth grade and
19 then say yes.

20 Q. Professor Nunberg, did you discuss your
21 testimony today with Mr. Chin during the previous
22 break?

23 A. Yes.

24 Q. What did you discuss?

25 A. I asked him if he was aware of the Ventana

1 you again, Professor Nunberg. We appreciate your
2 patience.

3 THE WITNESS: Thank you very much.

4 THE VIDEOGRAPHER: Okay. Here marks the
5 end of videotape number three in the deposition of
6 Professor Geoffrey Nunberg. The original videotapes
7 will be retained by LegaLink Boston, 210 South
8 Street, 11th floor, Boston, Massachusetts. Going
9 off the record, the time is 2:42.

10 (Whereupon, the deposition was
11 adjourned at 2:42 p.m.)

12 --oOo--

13 I declare under penalty of perjury that
14 the foregoing is true and correct. Subscribed at
15 _____, California, this _____ day of
16 _____, 2006.

17

18

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GEOFFREY D. NUNBERG

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1 CERTIFICATE OF REPORTER

2 I, CAROLYN M. MANN, a Certified Shorthand
3 Reporter, hereby certify that the witness in the
4 foregoing deposition was by me duly sworn to tell
5 the truth, the whole truth, and nothing but the
6 truth in the within-entitled cause;

7 That said deposition was taken down in
8 shorthand by me, a disinterested person, at the time
9 and place herein stated, and that the testimony of
10 the said witness was thereafter reduced to
11 typewriting, by computer, under my direction and
12 supervision;

13 That before completion of the deposition,
14 review of the transcript [X]was []was not
15 requested. If requested, any changes made by the
16 deponent (and provided to the reporter) during the
17 period allowed are appended hereto.

18 I further certify that I am not of counsel
19 or attorney for either or any of the parties to the
20 said deposition, nor in any way interested in the
21 event of this cause, and that I am not related to
22 any of the parties thereto.

23 DATED: _____, 2006

24 _____

25 CAROLYN M. MANN, CSR 10066

1 April 25, 2006

2 Geoffrey D. Nunberg, Ph.D.
3 370 Fair Oaks St.
4 San Francisco, CA 94110

5 Re: CytoLogix vs. Ventana Medical Systems

6 Dear Dr. Nunberg:

7 Please be advised that the original
8 transcript of your deposition taken April 20, 2006,
9 in the above-entitled matter is available for
10 reading and signing. The original transcript will
11 be held at the offices of:

12 LegaLink San Francisco
13 575 Market Street, 11th Floor
14 San Francisco, California 94105
15 (415) 357-4300

16 for thirty (30) days, in accordance with Federal
17 Rules of Civil Procedure Section 30(e). If you do
18 not sign your deposition within 30 days, it may be
19 used as fully as though signed.

20 If you are represented by counsel in this
21 matter, you may wish to ask your attorney how to
22 proceed. If you are not represented by counsel and
23 wish to review your transcript, please contact our
24 office for a mutually convenient appointment to
25 review your deposition.

Thank you for your cooperation.

Sincerely,

Carolyn M. Mann, CSR 10066

cc: Original transcript
Michael E. Zeliger, Attorney at Law
Roger J. Chin, M.D., Attorney at Law

LegaLink San Francisco (415) 357-4300